Get Your Mind Outta the Gutter:
Actor-Network Theory and Panel Layout in Comics

By

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A thesis presented to OCAD University in partial fulfillment of the requirements
of the degree of a Master of Arts
In
Contemporary Art, Design, and New Media Art Histories

Toronto, Ontario, Canada, April 2014

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Abstract


This thesis explains how the element of the panel layout in comics conveys both a linear progression of narrative and a simultaneous image for the reader. Using Bruno Latour’s Actor-Network Theory this research asserts that the portrayal of time and space in a comic should be considered as a network. While most definitions of comics rely on the sequential juxtaposition of the form, this thesis demonstrates how panel relations operate both sequentially and non-sequentially to produce meaning for the reader and thus changing the defining feature of the medium. To demonstrate how changes in panel layout affects various networks of time and space in comics I have examined three contemporary comics, Watchmen, “A Contract with God,” and Violent Cases.
Acknowledgements

I would like to thank my primary advisor Prof. Sarah McLean-Knapp for her hard work and dedication to this project. Thank you for your feedback and for being my personal cheerleader throughout this process. I would also like to thank Prof. Keith Bresnahan for being me secondary advisor in this last leg of my journey.
To Barbara Hazelton, my mother, mentor, and friend.
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Introduction

“So how is it that the reader of comics is able to make sense of a narrative that is displayed in multiple spaces, all of which exist at the same time? More specifically, what is the process that we use to combine panels to form a continuous narrative, across the ‘gutter’ (the space that lies between panels)?”

- Henry John Pratt

The objective of this thesis paper is to address Henry John Pratt’s question of narrative and the in-between moment that occurs amid panels in comics.

Specifically, I will investigate how time is portrayed in comics through panel layout. The aspect of the comic medium’s depiction of time in Matt Feazell’s *The

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*Incredible Mr. Spot* (fig. 1) emphasizes the existence of both linear time and the simultaneous presence of various moments of the comics’ action.² Feazell’s work exemplifies the comics’ key characteristic of presenting multiple instances of time. The panels of a comic inhabit both a linear progression of time through a narrative and are considered as a single moment of existence, where all panels of a page exist in relation to each other. This is of particular importance to the study of comics since the medium has continuously been defined and discussed in terms of its sequential structure.³ Thierry Groensteen states in *The System of Comics* that comics should be considered not as a strip but as a network.⁴ Following Groensteen and taking up Latour I will elaborate on how comics function as a network of space and time through the structure of the panel.

This in-between space of the medium, known as the “gutter”, is essential to the sequencing of events in a comic strip, comic book, or graphic novel.⁵ The gutter is important in the construction of a narrative due to its ability to differentiate moments on a page while allowing the various events depicted to exist simultaneously in close proximity. The panel layout of comics creates a unique experience of space and time in visual culture since it is able to convey information simultaneously while still carrying information in a linear progression of time.

⁵ For more on the difference between these modes of comic making please refer to the Appendix.
In the design of the object itself, the importance of the relationship between panels is essential for the medium to produce meaning. Each panel depicts a specific event that, only when placed in a sequence, articulates a story or an idea to the reader. It is the space in-between these panels that allows for the reader to actively contribute to the creation of the narrative by filling in the blank space between panels. Furthermore, the passing from panel-to-panel to create a narrative between the information provided by the author is a “largely unconscious” and a “mechanical operation” on the part of the reader.\(^6\) By applying Actor-Network Theory (henceforth referred to as ANT), a method created in the early 1980s, to comics I will demonstrate how the relationship between the panels, with a specific focus on panel layout, is able to convey a comic narrative both in a linear progression of time and as a simultaneous instant on the page. This methodology will emphasize that the associations drawn by the reader not only exist from panel-to-panel but also take place between panels that are not juxtaposed.

ANT will be used to unpack the passing of time that is unseen in the gutter space. This methodology was selected for the analysis of panel layout because of its notion of cultural objects existing as, and within, a decentralized network. In the case of the comic, panel layouts and the composition of the physical comic book are connected in a networked system relation to depict a narrative for the reader. Michel Callon and Bruno Latour originally developed ANT for sociology, science and technology studies during the early 1980s. In their work Callon and

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\(^6\) Groensteen, 10.
Latour investigate relationships between human and non-human actors in a system of human and mechanical participants. ATN is also known as “material-semiotics” as it is an analysis of networks that are made up of both material objects as well as semiotic concepts. ATN uses the tools of semiotics and adapts them into a “deployment” of associations, and allows for the investigation of the way the system exists, rather than investigating what the system means.

While ATN has been created for the study of science and technology in relation to social theory, it has been used in the field of art history to better understand social relationships built around art objects. Michael Zell uses ATN to investigate the relationship between Rembrandt’s art, Rembrandt’s patrons, and Rembrandt himself. Zell’s work investigates how the art object has agency as it acts to create and maintain Rembrandt’s network of relationships. Drawing on Zell’s investigation of ATN’s use within the study of art history, I posit that ATN can, and does, provide a new and more useful investigation of the composition of comics. To apply this method to comics specifically is integral to my study of the gutter which considers the physicality of the panel on the page -- not simply what the blank space of the gutter might mean, but what the space is in and of itself, and how it functions as a tool for meaning-making. By narrowing the field to this

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specific research method, I can succinctly identify the importance of this unseen moment in relation to the network of time and space the gutter creates.

Comics have strong visual cues based on the culture in which they are produced and the intended audience must interpret these symbols in relation to a larger system of cultural production. To narrow my field of research this investigation is only considering the American tradition of comic book making.\(^{11}\)

The first chapter of my thesis is a brief introduction to the history of comics and the development of panel layout. This will emphasize the key figures and publications that have been established in the canon of comics and how their work relates to this study of gutter space and the portrayal of time. Beginning with early narrative pictures such as *Trajan’s Column* I will present examples of early sequential art that have often been cited as early forms of narrative of comics. Moving into the creation of early comics I will outline how new perceptions of motion, such as chronophotography, and changes in concepts of time were reflected in the composition of early comics. I will then discuss the development of comic books and the new panel layout that accompanied an extended comic narrative. Finally I will analyze the underground comix movement and its influence on contemporary comic book creator Chris Ware.

\(^{11}\) Comics have certain cultural characteristics depending on where they are produced. Currently there are three distinct regional styles that comic produces work with or against and they are as follows: The United States, The French-Belgian area, and Japan (see Randy Duncan and Matthew J. Smith, *The Power of Comics: History, Form & Culture* (New York: International Publishing Group, 2009) 293.) To focus on more than one culture in this thesis would mean an investigation into different cultural influences that would affect the associations and relations that are reflected in the design of the comic form. The nature of this paper simply does not allow for this extended scope of research and therefore this paper tends toward an analysis of the American tradition of comic books.
In Chapter Two a brief description and history of ANT is provided to situate the methodological lens used in Chapters Three and Four. Looking at Bruno Latour’s works in ANT in particular, this chapter will first discuss key concepts unique to Latour’s method such as “black boxing networks” and the use of case studies to understand the decentralized network of associations the method attempts to trace. The second section of this chapter is then a hypothesis of how ANT can be applied to the comic arts as it relates to recent comic theory.

Chapter Three is an extension of the previous chapter as I propose that ANT can be used to investigate and understand the relationship between panel layout and a comic reader’s construct of time within the narrative. Time is portrayed in comics through the image, the dialogue found within the panel, and the structure of the panel itself. This chapter will focus on key theories of the depiction of time in comics as developed by several scholars within the field. In this section I demonstrate how previous scholars and practitioners such as Scott McCloud, Thierry Groensteen, and Will Eisner have discussed layout as well as the perception of time within comics narrative.

In my Fourth and final chapter I will analyze three comics and their use of panel layout to reflect different aspects of time within a narrative. I will use these case studies to apply key ANT concepts to the panel layout. By applying these concepts to concrete examples I will illustrate how time and space is constructed for a reader of comics. This section will analyze the framing and gutter space of three comics that use three distinct styles of panel layout. The differences in panel
layout will show how time is perceived differently based on the relationships shared by panels on a page. To demonstrate this relationship between reader and the panel layout I will use Alan Moore, David Gibbons and John Higgins’ *Watchmen* (1986), Will Eisner’s “A Contract with God” (1978) and Neil Gaiman and Dave McKean’s *Violent Cases* (1991). The examination of panel layout will begin with Moore, Gibbons and Higgins’ *Watchmen* as it utilizes a standard layout of a black frame separated by blank space, the most popular style of panel layout.\(^\text{12}\) The familiarity of the grid layout will demonstrate how the perception of time in the comic should be seen through a decentralized association of images as time progresses linearly on the page of a comic as well as being situated in relation to each other. From this I will move into an analysis of the looser panel structure of “A Contract with God” by Eisner. By moving from *Watchmen*’s standard layout structure to the free floating scenes of Eisner’s work I will demonstrate how the change in panel layout provides a change in the pacing of the comic’s narrative, the change in gutter space allowing for a different understanding of narrative time. The final cases study of Gaiman and McKean’s *Violent Cases* will demonstrate how a unique panel layout operates in the same manner as the standard layout, but depends on a more intensive effort for the reader in making connections between the elements on the page. These case studies will demonstrate how the panels of a page operate as a decentralized

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depiction of time as it exists simultaneously on a page but is also read as a linear narrative progression.

Previous scholarship on comics has laboured over the documentation of its history, and Thierry Groentseen rightly states, the writing produced around this medium is often riddled with nostalgia and idolatry. This thesis is a direct attempt to analyze the formal element of panel layout to better understand how the medium communicates. This is important to the growing literature on comics as the medium now enters into serious academic consideration. Comics have been defined by their qualities of sequential juxtaposition. By investigating the possibilities of this defining aspect of comics I will demonstrate how not only the sequence, but also the network relationship shared across a multitude of panels, provides a unique reader experience.

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13 Groensteen, 1.
Chapter 1: Comic History and the Panel

Joseph Witek argues in his essay “The Arrow and the Grid” that instead of looking for comics’ predecessor we should instead note the changes in a graphic narrative as changing attitudes in Western reading practices. This first chapter will demonstrate how sequential images have utilized the complex framework of temporality characteristic of comics. These canonical comics make use of both linear narratives as well as utilize panel layout to reflect the intent of the narrative. By looking at the following works I will demonstrate how comics creators make use of the medium itself to provide new understandings of time in narrative. The historical investigation will provide a background to understanding the development of panel styles, their relationship to narrative time, and developments in Western conventions of reading. Changes in panel layout that are discussed here are therefore dependent on new approaches to reading graphic narratives. This section will explore how the composition of juxtaposed images has evolved over the course of comic history.

The history of comics has yet to have clearly defined an agreed-upon periodization. Due to the lack of defined eras of the history of comics I have made use of key figures and publications within the medium’s history to demonstrate the scope of panel relations in comics, rather than align this work with one

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particular scholar’s timeline. I begin this investigation of panel layout and time with *Trajan’s Column* (113 AD), as it is often cited as an early example of sequential art and, ultimately, the predecessor of the comic medium. I will briefly discuss the development of image sequencing in print by considering the works of William Hogarth. From this I will move into a discussion of the depiction of surreal temporal relations as seen in Winsor McCay’s *Little Nemo in Slumberland* (1905) and George Herriman’s *Krazy Kat* (begun in 1913). Finally I will discuss the contemporary comics of Art Spiegelman and Chris Ware to position how current comics creators use the panel layout to express complex aspects of narrative time. To being this investigation I will analyze how time is portrayed in early sequential art.

**Before the Panel: Trajan’s Column**

Scott McCloud, in his influential study *Understanding Comics: The Invisible Art*, argues that the history of the comic form extends to the first forms of sequential art, such as the *Bayeux Tapestry* (1070) and *Trajan’s Column* (*fig. 2*). In fact, McCloud praises these ancient forms of graphic narrative structure, singling the *Bayeux Tapestry* for its use of a unified composition layout, commenting that modern comics creators do not realise the potential for whole page panel layout compositions. Thierry Groensteen finds that the panel layout

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15 For more information on periodization in the comic arts please refer to the appendix.
17 ibid., 15.
18 ibid., 12.
of a comic strip, the horizontal arrangement of panels, can be attributed to these earlier forms of graphic story telling due to their own emphasis on the horizontal movement.19

Richard Brilliant argues that the story depicted on *Trajan’s Column* can be read through three different modes for interpretation, and that all three work together simultaneously.20 Philip Waddell argues that the graphic narrative of *Trajan’s Column* is similar to film in its temporal unfolding of narrative.21 Waddell states that the use of tableaux in the narrative telling of *Trajan’s Column* is similar to the sequential ordering of scenes in a film if the style of the frieze is compared to the cinematic style of a quick-cut camera technique.22 The example that Waddell uses to illustrate his point is a tableau depicting a Dacian camp juxtaposed to a Roman camp separated by two trees (*fig. 2*).23 As the camps are depicted side-by-side, but are separated through the border produced by the trees, the viewer is able to draw comparisons between the two images, and therefore the two camps, without confusion between the two allegiances.24 The two trees allow for the camps to exist simultaneously within the linear telling of the narrative.

19 Groensteen, 58. It should be noted, however, that there were instances of serial comics that worked in the vertical during the early 19th century, however, these comics are not as easily read by contemporary audiences. For more see Joseph Witek and David Kunzle, *History of the Comic Strip*, (Berkeley: University of California Press, 1973).
21 Waddell, 475.
22 ibid. For more on the comparison between comics and the cinematic quick-cut see Miodrag,112-113.
23 Waddell, 476.
24 ibid., 477.
The column’s two hundred-meter frieze demonstrates a temporal unfolding of narrative. Waddell explains that while the story is told from the bottom of the column and spirals up towards the apex, the Romans would have also made connections between the vertical juxtaposition of the depicted scenes.\textsuperscript{25} However, the column’s counter-clock wise spiral composition is now a piece of visual culture that is difficult for contemporary readers to understand.\textsuperscript{26} While the horizontal progression of images as seen in \textit{Trajan’s Column} is essential to the representation of a sequence of events in comics today, the standardization of the comics’ panel layout is attributed to the invention of the printing press.\textsuperscript{27}

![Figure 2. Column of Trajan, Scenes 67 and 68. Photography by Phillip Waddell, 2013.](image)

**Hogarth, Töpffer, and Outcault**

There is some debate as to who deserves the title of originator of comics between William Hogarth and Rudolph Töpffer. Hogarth’s work \textit{A Harlot’s}

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{25} Waddell, 747.
\item \textsuperscript{26} ibid., 745.
\item \textsuperscript{27} McCloud, 15.
\end{itemize}
\end{footnotesize}
*Progress* (1731) is a narrative comprised of six images that have a predetermined sequence based on Hogarth’s composition. Although these images are to be viewed in a specific sequence, they are not portrayed on the same page like comics’ panels. It was not until Rodolphe Töpffer in the mid 19th century that the first instance of the comic medium appears which sets up a purposeful sequence of events through images that are wholly dependant on the other.

It was with Töpffer’s works that the comics’ style of panels, framing, and text-and-image dependant type, was first established. Töpffer also developed a “shorthand” style of depicting images that would develop into the cartoon symbols recognized today. This development in what is referred to as Töpffer’s short hand demonstrates a new method of “perceiving the myriad relationship between word and image on the page.” It would be Töpffer’s work *Les Amours de Monsieur Vieux Bois* or *The Adventures of Obadiah Oldbuck* that, when translated into English, would make its way to an American audience in the 1840s and influence Richard F. Outcault to produce one of the first American newspaper comic strips.

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30 Meskin and Cook, xxi.
31 Duncan and Smith, 25.
32 Witek, 150.
33 Duncan and Smith, 25.
There are two significant streams in comics’ development, the first being the newspaper comic strip, and the second pulp magazines.\textsuperscript{34} It was with the development of the newspaper that the comic strip had a medium in which standardization of panel layout would occur. It was in 1895 that Outcault’s \textit{Hogan’s Alley}, a comic strip featuring characters from urban slums, made comics hugely popular.\textsuperscript{35} \textit{The Yellow Kid} (fig. 3), from \textit{Hogan’s Alley} introduced devices unique to comics, such as panels and speech balloons, in the 1890s.\textsuperscript{36} When multiple frames did appear in the comic strip the panels were numbered to indicate the sequence of events taking place.\textsuperscript{37} \textit{Hogan’s Alley} is cited as the key to the creation of the American comic strip as N. C. Christopher Couch argues that Outcault created the template for American comics.\textsuperscript{38} Couch claims that the format of the American comics arose form the format of humour magazine pages, as these page layouts featured a multiple columns in their page layout, and it was the development of inserting images into these columns of text that would separate the action of the narrative.\textsuperscript{39}

\textsuperscript{34} Duncan and Smith, 26.
\textsuperscript{39} ibid., 66-67.
In the above example of Outcault’s *The Yellow Kid*, the numbers on the top right hand corners indicate the sequence in which the events of the comic occur. In this particular comic strip depicting the yellow kid’s attempt to golf, there are several instances where the panel border is broken by the animals of the scene. As the numbering of panels demonstrates this comic strip is to be read from left-to-right and from top-to-bottom. However, Outcault also plays with the idea of the simultaneity of the comic strip’s panels. The cat in the second panel chases the golf ball into the bottom right corner of the panel, while the bird in the sixth panel flies towards the upper left hand corner. Both of these animals break the panel frame and are placed in relation to the panel in which they are situated as well as in relation to each other, the cat simultaneously chasing the golf ball and eyeing the bird. This play between two moments of a story, the progression of the yellow
kid attempting to golf and the interactions between the cat and bird, demonstrate how a comics’ panel layout can feature several different modes of time.

**Winsor McCay, and George Herriman**

The numbering of panels was popular but sporadic during the 1890s, and into the first two decades of the 20th century, but speaks to the evolution of the comics’ panel layout.40 George Herriman’s use of the number system of the panels is shown to exemplify the comics’ nature of sequence and inhabiting the single moment on the page. As Joseph Witek claims, the number of panels in Herriman’s case points towards the relationship between words and images that comprise comics. Herriman numbers his panels in *Krazy Kat* (begun in 1913) using both spelled-out words and numerals. The written number, Witek argues, represents the text in comics, while the numerals represent the iconic image in comics.41 By using both the numeral and the word to denote the sequencing of panels, Herriman draws attention to the formatting of comics, and that even though the whole page can be produced as one image, the panels are still meant to be read in a chronological order.42

Winsor McCay’s seminal work *Little Nemo in Slumberland* (fig. 4) begun in 1905, exemplifies both new depictions of time and space in relation to the moving image. Carlin credits McCay with creating the “language” of comics with the combination of word and image, as it is understood in meaning making

40 Witek, 150.
41 Ibid., 151.
42 Ibid.
processes for the contemporary reader. Scott Bukatman’s analysis of McCay’s *Little Nemo in Slumberland* and *Little Sammy Sneeze* (1905) relates the breakdown of the character’s movement through time and panel layout to the medium of chronophotography. Bukatman compares the depiction of movement seen in the even layout of panels of *Little Nemo in Slumberland* with the even repetition of frames in Eadweard Muybridge’s chronophotography of *Horse in Motion* (1887) (fig. 5). The similarities between the even proportions of the panels in relation to the motion of the horse in *Little Nemo in Slumberland* demonstrate that McCay reconsidered the visualization of movement through time, and space. McCay’s work was given a large, sixteen by twenty-one inch page in which he could develop longer graphic narratives than that of the simple, one tier comic strip, and it was here that he utilized the similar framing device and character movement through time.

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43 Carlin, 24.
45 ibid., 86-87.
46 ibid.
The panel format of *Little Nemo in Slumberland* references the even pacing of images in Muybridge’s work. It is McCay’s *Little Sammy Sneeze* (fig. 6) that exemplifies the relationship between the comic strip’s narrative and the composition of a comic. As *Little Sammy Sneeze* follows a linear progression...
through time in these six panels, the reader is made aware of the formal elements of the panel as it breaks from Sammy’s almighty sneeze. This comic can be compared to the movement of time displayed in a zoetrope, the machine for viewing chronophotographs in sequence, to provide the illusion of animation/life, in which the viewer can witness the action, as well as see the mechanics of the medium. The analogy of the zoetrope is later used in the works of contemporary comic writer and artist Chris Ware, discussed later in this chapter.

![Image of Little Sammy Sneeze comic strip]

Figure 6. Little Sammy Sneeze. September 24, 1905. Original by Winsor McCay.

**The Emergence of the Comic Book: *Famous Funnies***

The first comic books were created between 1897 and 1932 and were, at first, compilations of reprinted comic strips.\(^48\) Simultaneously, Lynd Ward

\(^{48}\) Duncan and Smith, 26.
produced several books of woodcut prints that read in a sequential order to create a graphic narrative.\textsuperscript{49} The first comic book was the initial publication of \textit{Famous Funnies}, of which there were three iterations. \textit{Famous Funnies: A Carnival of Comics, Famous Funnies: Series One #1} and \textit{Famous Funnies #1} began a long publishing career for Eastern Colour Printing and salesmen Maxwell Charles Gaines and Harry L. Wildenberg.\textsuperscript{50} It was during this time that the popular comic book superhero arose and came to dominate comic book culture. The pulp magazine’s contribution to the evolution of the comic book is especially noted with the publication of \textit{The Shadow, A Detective Magazine}, which was one of the first publications to feature only one comic series within its pages.\textsuperscript{51} The superhero phenomena and the comic’s roots in pulp publications have often been blamed for the impression that the medium itself is juvenile and unsophisticated.\textsuperscript{52}

The composition of the comic book differs, for Duncan and Smith, from the comic strip in both its physical composition and the readership that it attracts.\textsuperscript{53} Witek states that several early panel layouts in comic books feature directional arrows to guide the reader through the comic’s narrative due to the

\textsuperscript{49} Will Eisner, \textit{A Contract With God and Other Tenement Stories: A Graphic Novel} (New York: W.W. Norton & Co, 2006): i. Eisner attributes his appreciation for the comic arts and his own approach to the medium to Ward.

\textsuperscript{50} Duncan and Smith, 29.

\textsuperscript{51} ibid., 28.

\textsuperscript{52} ibid., 32. Randy Duncan and Mathew J. Smith find that \textit{Superman} has been beneficial to the genre of comics books in terms of the industry finding financial success, however, conclude that it has also been detrimental to the medium’s position as a form of fine art as this early superhero genre gives the medium a infantile connotation.

\textsuperscript{53} Duncan and Smith, 6.
adaptation of the medium from the strip to the lengthy comic book.\textsuperscript{54} Comics found in newspapers have less flexibility in their panel layout than their comic book counterpart since the newspaper strip is often limited in space, while the comic book allows for more freedom with the entirety of the page.\textsuperscript{55}

**Alternative Comics, Robert Crumb, and Art Spiegelman**

Edward A. Shannon believes that Robert Crumb’s alternative comic style is a reflection and extension of McCay’s *Little Nemo in Slumberland*.\textsuperscript{56} Both comics contain surrealist content and their formal structures are similar in terms of story structure.\textsuperscript{57} Like that of McCay’s comics, Crumb’s compositions of stories are in the form of short “episodic narratives” rather than the lengthy narrative of a graphic novel.\textsuperscript{58} Crumb’s comics also take on a confessional role as he distorts the distinction between himself and his characters, incorporating semi-autobiographical narrative to his comics.\textsuperscript{59} The confessional style of Crumb’s is considered the beginning of the autobiographical comic, a popular trend in recent comic publications. Art Spiegelman’s own autobiographical narrative style was strongly influenced by Crumb’s work.\textsuperscript{60}

\textsuperscript{54} Witek, 152.  
\textsuperscript{55} Duncan and Smith, 7.  
\textsuperscript{56} Shannon, 187  
\textsuperscript{57} ibid.  
\textsuperscript{58} ibid., 205.  
Spiegelman’s work *Maus: A Survivor’s Tale Volume I: My Father Bleeds History* was first published in the 1980s and originally appeared in an underground comics format.\(^{61}\) Pantheon and Penguin later published the series in the form of a graphic novel between 1986-1987.\(^{62}\) Spiegelman’s second instalment of *Maus*, titled *Maus II: And Here My Troubles Began*, was published in 1992 and it was in that same year that Spiegelman became the first comics’ creator to win a Pulitzer Prize for Literature, effectively taking the once underground comics style into the mainstream.\(^{63}\)

*Maus* has a unique composition of time and narrative. The passing of time and the relationship between generations is of particular importance to the story of the graphic novel. The breaking of time between the “present”, the time which the narrator inhabits, and the historical recollection of World War II is illustrated through a complex panel layout.\(^{64}\) The relationship between the panels used in *Maus* create a multifaceted mode of story telling that works in three separate time lines: the present time of the narrator, the struggle to recount the events of WWII by their veterans, and the historical events of WII.\(^{65}\) Often the panels will contain two time periods within the same panel.\(^{66}\) The complexities of the panel layout also demonstrate how film has influenced Spiegelman’s work. Thomas Doherty examines the impact the film footage of WWII had on the creation of *Maus* and

\(^{61}\) Meskin and Cook, xxiv. Sabin, 182.
\(^{62}\) Sabin, 182.
\(^{63}\) ibid.,188.
\(^{65}\) ibid., 181.
\(^{66}\) McGlothlin, 182.
discusses how the comic rendition of Vladek’s and Artie’s story provides an intimate understanding of WWII. Doherty argues that Spiegelman’s depictions of WWII in Maus were a “low-definition” interpretation of “high-definition” newsreel and this created dissonance between the events recorded and the events processed through memory.

Autobiographical comics have become frequently used as a medium to convey history, the creators often commenting on the narration of the past as being one that is essentially biased. While Crumb’s use of short narratives and surreal scenes links McCay’s work to Crumb’s own underground comix movement, Spiegelman’s associations with alternative comics eventually lead to the acceptance of comics as a literary form worthy of critical engagement. From these comics arose a new understanding of the type of narrative that Chris Ware utilizes in his works.

Contemporary Comics: Chris Ware

Chris Ware’s comic books utilize unique panel layouts that demonstrate how some contemporary comics are experimenting with the medium. The story of Jimmy Corrigan: The Smartest Kid on Earth, like that of Speigelman’s Maus, focuses on the relationship between familial accounts and the juxtaposition of

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68 ibid., 77.
70 Carlin,154.
stories from different generations to create a complex understanding of narrative
time. Much like the comics by McCay, Ware also utilizes dream sequences that
break the narrative into the real and the fantastical. Ware is cognisant of the
construction of comics’ panel layout and its importance to the pacing and telling
of a story, comparing this aspect to notes in a musical composition, as well as
emphasizing the importance of the juxtaposition of images on a page to create an
overall aesthetic, a practice that Ware relates to the façade of a building.\footnote{Bredehoft, 870.} The
emotion of a narrative is represented in the panel structure and formal language of
his comics, and Ware finds new means of portraying complex emotions and
concepts.\footnote{Carlin, 155.} In the beginning of his work \textit{Jimmy Corrigan: The Smartest Kid on
Earth}, Ware discusses the “language” of comics in a tongue-in-cheek essay titled
“New Pictorial Language Makes Marks: Good for Showing Stuff, Leaving out
Big Words.”\footnote{Chris Ware, \textit{Jimmy Corrigan: The Smartest Kid on Earth} (New York: Pantheon Books, 2003),
inside cover.} Ware’s comics often use a simple aesthetic that is, at times,
compared to the clean lines of a diagram. However, Ware intentionally makes
some of his panel layouts difficult for readers to understand, emphasizing the
possibility of multiple interpretations and misinterpretations in any graphic text.

The narrative, and the passing of time as seen in the examples prior to
Ware’s work, is represented only in the two-dimensional. The panels of the page
in \textit{Jimmy Corrigan}, which do feature a more conventional panel layout for the
progression of the narrative, are interrupted by Ware’s inclusion of a series of cut-
out activities for the reader. These cut-outs are designed to be removed from the page and built into a three-dimensional shape. One such example is of a three-dimensional zoetrope. This activity is included at the same moment within the story when the character Jimmy interacts with a zoetrope, but it also posits the question of how, what Thomas Bredehoft calls the “architecture” of comics, simultaneously depicts sequential events and a single, juxtaposed, moment.

Ware’s comics often act like instructional diagrams. Some of his comics lead to a narrative, while others simply lead to dead ends, and many panel layouts lead the reader through a complex system of images that purposefully frustrate the reader. The diagrams appear to compare the comic medium and its mechanics to that of linguistics. Isaac Cates writes:

“In short, Ware’s diagram seems to be arguing for a sense of the comic medium that is much nearer to language and linguistic concerns than McCloud’s: one that gives as much credit to comics’ elaborate system of signs as it does to the basic grammar of visual sequences. This revised definition might also allow for more variety in the nature of visual juxtaposition than mere narrative sequence, since several of the series of panels in this diagram aren’t sequential: often they present arrays or ranges of possibilities, from which a single example is selected.”

The system of signs and their “arrays” and “ranges of possibilities,” though exemplified in Ware’s graphic novels, are found in all instances of the comic since its inception.

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74 Bredehoft, 870.
75 ibid., 871.
76 Isaac Cates, “Comics and the Grammar of Diagrams” The Comics of Chris Ware: Drawing is a way of Thinking ed. David M. Ball and Martha B. Kuhlman (Jackson: University of Mississippi Press, 2010), 97.
77 Cates, 91.
Returning to the discussion of McCay’s *Little Sammy Sneeze*, the interest in exposing comics’ modes of representation can be observed in the use of the panel and page layout. In *Jimmy Corrigan*, devices such as the zoetrope, magic lantern slides, and Muybridge’s horse photographs appear in the narrative. These sequential images, found in these pre-cinematic mediums, allows for a re-examination of the slow sequences found in comics’ main narrative. Cates argues that in going beyond the narrative time depicted in comics, it is possible that comics could “borrow from the wider range graphic semantics” of the non-chronological. This possibility opens the comic medium to the juxtaposition of images to create the non-sequential metaphor or “thematic synopsis”. The panel layouts discussed in this section introduce both the historical understanding of panel layout and contemporary play with the medium. Cates ends his essay with, “The diagrams in *Jimmy Corrigan*, in particular, show not only the secret interrelations of his main characters, but also the capacity of comics at once to conceal and to reveal, to mean in multiple ways simultaneously.” This brief history of the development of comics in relation to changes in panel layout styles now leads into an introduction of Actor-Network Theory. By introducing several key concepts from ANT this work will then seek to link the two concepts in the third chapter.

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78 Cates, 91.
79 ibid., 99.
80 ibid.
81 ibid., 102.
Chapter 2: Actor-Network Theory

Actor-Network Theory is, in its simplest form, a study of associations. In this chapter I will provide a brief introduction to the origins of Actor-Network Theory and will demonstrate how this methodology can be applied to pre-existing comics theory. Despite the common misconceptions surrounding the term, Actor-Network Theory is not a theory but a methodology. ANT is related to the field of phenomenology, the philosophy of experience and consciousness as well as the study of semiotics. ANT extends the work of semiotics to identify actors or participating signs within a network by tracing the interactions and associations of one actor within a network of other actors. These actors, because of ANT’s origin in phenomenology, may include both human and non-human ‘participants’.  

The term Actor-Network Theory was coined by Michel Callon in 1982 as he sought a new methodology to analyze the social relations he found within science and technology. ANT appears to have predecessors in Gabriel Tarde’s work, however, it was not until 1982 that the methodology was identified and named. Tarde’s concept of “activity” in the social predates ANT. The concept of “activity” that Tarde references are also found within Newtonian theories of gravitation, specifically the idea that one can witness the effects of the action, but

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not the action itself. Tarde’s theories of activity can be likened to Callon and Latour’s concept of following the actors of a network. The application of ANT to other fields of study has since been widespread, due to its malleability as a methodology. ANT can be “…understood as an empirical version of post-structuralism,” particularly due to its framework, which differs from Marx and Durkheim’s “certain framework” to express varying behaviours. Later John Law would relate ANT to Gilles Deleuze’s nomadic philosophy, opening the interpretation of the methodology to a broader basis than that of the strictly sociological.

Central to the theory of ANT is that agency is given to human as well as the non-human actors of an observed relationship. Latour sees the social as something that should be studied as a “tracing of associations”. Before looking at ANT in relation to the structure or narrative in comics, I will first attempt to summarize the development of the method, identify its major scholars, and observe the application of ANT to other fields of study. ANT’s broad applicability makes the subject itself difficult to summarize. Bryan Turner explains that it is impossible to understand ANT outside of case studies; however, I will first

86 ibid.,145. ANT is different from Marx and Durkheim because of Marx’s capitalism and Durkheim’s integration methodologies that place human experience above that of the non-human and used to explain sociological conditions of the macro and the micro.
87 ibid. Latour later says that ANT should be thought of as “actor rhizomes” instead of the misleading term of “actor networks.”
88 Latour, Reassembling the Social, 5.
attempt an explanation of ANT in the abstract and then utilize several key examples of ANT from Bruno Latour and Michel Callon.\textsuperscript{89}

Bruno Latour’s \textit{Reassembling the Social: An Introduction to Actor-Network-Theory} (2005) poses the question of how to trace associations without turning the associations into a material that is stable.\textsuperscript{90} Latour’s book is concerned with identifying the social and analyzing what the social implies when one refers to a “social dimension”.\textsuperscript{91} Bryan S. Turner aptly describes ANT as “…material-semiotic tools, sensibilities, and methods of analysis,” and observes that there is nothing that exists outside of relationships.\textsuperscript{92} An “actor” in ANT or an “actant” is that which either acts or “to which activity is granted by others”, as long as it is the source of an action.\textsuperscript{93} The actant in ANT is itself a semiotic definition, as it is understood that it is acting or being acted upon, and can therefore be either both human, or non-human.\textsuperscript{94}

It is important to note that anything can be considered both an actor and a network, depending on the perspective or approach taken to the subject.\textsuperscript{95} As Darryl Cressman states, “… ANT attempts to ‘open the black box’ of science and technology by tracing the complex relationship that exist between governments, technologies, knowledge, texts, money and people.”\textsuperscript{96} Additionally, an actor itself

\textsuperscript{89} Law, 141.
\textsuperscript{90} Latour, \textit{Reassembling the Social}. 1.
\textsuperscript{91} ibid., 3.
\textsuperscript{92} Law, 141.
\textsuperscript{94} Cressman, 3.
\textsuperscript{95} ibid.
\textsuperscript{96} ibid.
may be made up of a network, and the simplification of the network to a node or an actor, otherwise known as “black boxing,” is part of building a network of relations. 97 This abstract tool of “the black box” is able to transform a network, such as the network of a computer’s motherboard, into a node, such as a computer within the larger network of the Internet.

An actor is dependant on the strengths of its associations, and tracing the associations of the actors is the principle of ANT. This relates to the concept of macro-actors and micro-actors as black boxes of a network or relationship are ideas that do not need to be investigated since they have become naturalized, Callon and Latour stating, “… macro-actors are micro-actors seated on top of many (leaky) black boxes.”98 “The black box,” the term originating from technology studies, is an object that appears self-evident to the observer but in fact may house a variety of systems within it.99 This process of naturalization in this notion of “the black box” is similar to the naturalization of visual cues and symbols that compose a visual narrative in comics, as the narrative is understood but the mechanics behind what is being portrayed is not fully understood by the reader. Latour says that, “Opening the black box of technology leads the way to an investigation of the ways in which a variety of social aspects and technical

97 Law, 147.
99 Cressman, 6.
elements are associated and come together as a durable whole, or black box.”⁹⁰

Cressman notes that “black boxing” is not unique to ANT but that the concept of “punctualization,” which is unique to ANT, holds similarities to that of “the black box,” as punctualization is the process of making an actor-network into a node of another network.⁹¹

Turner, Callon, and Latour provide case studies that outline the problems ANT attempts to address to demonstrate how ANT functions as a methodology as it is concerned with the local. Callon’s work on the question of how one is able to analyze a system of both the social and the material, uses the example of Edison’s engineering projects as a case study, and attributes the success of these projects, to the relationships between the people and mechanics involved in these systems.⁹²

Callon had also conducted a study on scallops, which has been recognized as an early demonstration of ANT used to understand a social network comprised of both human and non-human entities. In this study he calls this early ANT method a “sociology of translation.”⁹³

The term translation in ANT refers to the impact that the actors have on other actors within the network and is essential in the tracing of associations. John Law uses Latour’s case study of the Portuguese control over India to demonstrate how the methodology of ANT is comprised of the following: “semitic

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⁹⁰ Cressman, 6.
⁹¹ ibid., 6-7.
⁹² Law, 143.
relationality (it’s a network whose elements define and shape one another), heterogeneity (there are different kinds of actors, humans and otherwise) and materiality (stuff is there aplenty, not just “the social”). These case studies exemplify how an actor’s relations to other actors define a network. Furthermore, the case studies demonstrate that agency is given to both human and non-human actors within the network.

**Application of ANT to Comics**

As McCloud discusses in *Understanding Comics*, there has been a strong tendency in American culture to demarcate the differences between words and images, and that writers are separate from visual artists. By applying ANT, a method that provides a way of examining relationships beyond binary associations, to comics it accomplishes two goals. The first is to address the definition of comics that emphasizes the sequentiality of images as an integral aspect of the medium. The second is to demonstrate that there is more than a linear reading of comics’ panels, as the panel layout is seen all at once on the page.

ANT works to have a “background/foreground reversal,” which means that there is no “meta-law,” or overarching rule to dictate the “smaller instances,” or smaller networks. By this logic, it would seem evident that the instance of the panel, which will very from comic to comic, can be connected to the panels

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104 Law, 146.
105 McCloud, 47.
surrounding it, without having to adhere to any particular universal rules of comics. Latour writes about the tracing of associations as follows:

“Less metaphorically, whereas universalists have to fill in the whole surface either with order or with contingencies, AT do [sic] not attempt to fill in what is in between local pocket of orders or in between the filaments relating these contingencies.”¹⁰⁷

This concept of “filling in” or not “filling in” the in-between space of a network can relate to the gutter space of comics. ANT does not need to fill in the in-between space of actors. A comics’ panel itself can exist as a node within a network as the narrative, and the gutter space acts as the network’s “in-between” space. If we are to say that the panels of a comic book are actors within the network of a narrative, then the addition of a reader means that there is a participant interpreting the network. However, the reader can also become an actant within the network, as comics are able to become a node within a larger network of, for example, popular culture.

A network is, as explained by Latour, “… not a thing but the recorded movement of a thing.”¹⁰⁸ Latour notes that it is documentation of what is moving and also of how the movement is recorded.¹⁰⁹ In the instance of comics, the movement that is being recorded is that of narrative time, which is documented in fragments of panels, as outlined by McCloud above. The term “network” has

¹⁰⁸ ibid., 14.
¹⁰⁹ ibid.
two meanings in ANT, the first being that it is an “architecture” or “institution” of several actants, and the second is the verb “network” as it is being created.110

Comics can work as a black box when being read, as the structures of comics are naturalized for the reader. This aspect of ANT shows how the medium itself can act as an actor to the same degree as the reader within the relationship due to the agency given to both human and non-human actors within the network. Barbara Postema likens the concept of the gap in Wolfgang Iser’s writing on narrative to what we recognize as missing from comics, namely that balance between what is portrayed to the audience and what is left out, that the reader must piece together.111

Iser’s reception theory is concerned with the impact a text has on a reader, and the reaction a reader has to a piece of literature.112 This theory examines the process of reading rather than an analysis of what a text might mean.113 Iser’s theories, like Latour’s ANT, stem from phenomenology. Arguing that there is a non-linear network that is created through the organization of sentences, Iser’s reader-response criticism suggests that when there are “gaps” in a given text, the reader still attempts to organize the narrative to fill in any inconsistencies.114 Iser uses the concept of an ideal reader in the application of his reader response theory and this same notion of the ideal reader is applied to this interpretation of ANT in

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110 Cressman, 11.
111 Postema, 106.
113 ibid., 983.
Iser’s theory sheds light on the function of the gutter and the reader’s response to the “lack” that exists in comics’ juxtaposition of images. The “gap” in comics differs from that of literature due to its visibility, both between panels and between the written text and the companying image. Additionally it demonstrates the importance of the reader in building the network of meaning from a text. While Iser’s reader-response criticism is very similar in concept, ANT, as it is used in this thesis, simply highlights the network effect of comics’ panel layout, rather than the work done onto the system by the reader.

In the early years of the medium, comics often had arrows directing the reader through the narrative. Most comics produced now do not rely on explicit directional signage. Comics operate as a “black box”: the average reader might not be aware of the nuances a panel layout carries, but can understand the narrative nonetheless. Readers are able to comprehend the narrative regardless of their background in the formal elements of comics, i.e. without understanding the mechanism of how panel-to-panel relationships are constructed (and the gutter itself can often become unnoticed in the construction of the narrative). Thierry Groensteen addresses the nature of the a panel in the introduction of The System of Comics by stating, “… the comic’s panel is fragmentary and caught in a system of proliferation; it never makes up the totality of the utterance but can and must be

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116 Miodrag, 66.
understood as a component in a larger apparatus.” Groensteen likens comics to a system due to the proliferation of codes that can be found within the visual cues of the medium.

While Groensteen’s 1999 book *The System of Comics*, does not directly link Actor-Network Theory to comics, it does analyze the medium through the development of a network system of comics’ formal elements. The key concepts of Groensteen’s work, such as “arthrology” and “braiding” moves towards an understanding of comics’ formal elements through a process of network relationships such as seen in ANT, without directly applying ANT methodology. He views comics as a language itself but is reluctant to situate them in relation to a larger methodological lens, placing his analysis relative to the field of ‘neo-semiotics’.

Groensteen establishes that the most important part of comics is the code, or codes, that govern time and space, and emphasizes the role the panel layout has in the depiction of these narrative aspects. Arthrology is the relationship the composition of comics has both in the linear and in the non-linear relations made through the panels. In *The System of Comics*, the proposition of comics as a network is conceived of as “a dechronologized mode, that of the collection, of the panoptical spread and of coexistence, considering the possibility of translinear

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117 Groensteen, 5.
118 ibid., 6.
119 ibid., 2.
120 ibid., 4.
121 Miodrag, 110.
relations and plurivectoral courses…” Groensteen finds that it is the network that is the most appropriate model for defining comics, rather than McCloud’s concept of juxtaposed sequential images. The concept of braiding, or the linking of the iconic that is non-sequential, is central to the process of meaning-making in comics and is an extension of the network within comics. The process of braiding is the connection of not only the panels as they are read, but of the many components that comprise a comic, and the allusions and motifs that comprise the composition as a whole.

ANT highlights that the technical should not be considered only as an object, but should be viewed instead as a process. Similarly, comics work as a process. Latour posits that technology is used to convert that which takes a lot of effort, into something that requires little effort, and therefore any particular technology changes the way in which we interact with a particular aspect of daily life. ANT acts as a means to research and reveal that which is often overlooked in the study of technology, namely the associations created within a system of people and objects. A continuation of that logic reveals nuances of comics and how we read them, in particular the medium’s portrayal of time. In the following chapter, I will address the differences that text makes in the perception of the passing of time in comics, as well the movement from panel to panel, and various

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122 Miodrag, 110, and Groensteen, 146-147.
123 ibid.
124 Miodrag, 134.
125 Cressman, 10.
126 ibid.
framing devices that create a network of time and space within the sequential nature of comics’ narrative.
Chapter 3: Panels, Frames, Gutters, and Everything “In-between”

The components of comics are varied from comic to comic, either in their use or in their style, yet there are certain elements of comics that remain integral to the overall making of meaning. Eisner speaks of a new literacy that surrounds comics that emerged during the 1990s: “to a young generation brought up with television, computers and video games, processing verbal and visual information on several levels at once seems natural, even preferable.”127 This chapter will investigate the aspects of this new type of literacy in relation to the perception of time within comics.

There are currently several different approaches to understanding panel layout and the depiction of time. One view of comics’ portrayal of time in panel layout is Scott McCloud’s concept of comics acting as a “map” for time, meaning that comics’ use of space, or the space of the panel, represents a moment. In McCloud’s work the panel and its contents portrays time as a moment that acts as a signpost in the narrative, and the contents of the panel demonstrates a specific diegetic time for the reader to perceive. On the other hand, there is the scholarship produced by Neil Cohn that is in direct opposition to McCloud’s, as he states that space does not stand for time, but that a reader’s understanding of a cluster of images, and the juxtaposition of these clusters, allows for an understanding of

Indeed, Hannah Miodrag and Neil Cohn argue that time in a narrative is not portrayed by the panels at all, but that the panel structure only affects the “rhythmic pace” that the reader experiences in the telling of the narrative. This chapter will examine both arguments of understanding panel layout and demonstrate how ANT’s concepts, as discussed in the previous chapter, are active in comics. This will show how comics’ scholarship has approached the issue of the reader’s time and diegetic time, and will exemplify my position that comics operate in a network of associations. First the relation between the perceptions of time in relation to the text in comics will be analyzed, followed by that of the panels of comics, with a brief conclusion regarding the relationship between the perception of time and narrative within comics as compared to the medium of film.

Text and Time

Eisner finds that in writing there is a role of conversion, in that the language must be converted in imagery within the mind of the reader. However, if images are provided --as they are in a comic book-- then they act the same as language. Thomas E. Wartenberg argues that neither text nor image

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129 Moidrag,118.
130 Eisner, *Graphic Story Telling*, 5.
131 ibid.
should be given greater priority when paired together in comics.\textsuperscript{132} Wartenberg argues that you need text to have a comic, and comics without words are different from the comic genre.\textsuperscript{133} To focus on the panel layout and its portrayal of time in relation to the writings of McCloud, a look inside the panel to identify the differences between McCloud’s notion of time within comics’ narrative, and that of Cohn’s. Comics do not contain sound, music or motion, and so the audience must imagine these aspects of the story, or as Eisner describes it, “act out” these elements.\textsuperscript{134}

The text of the comic book promotes understanding of the pictorial through the physical placement of the text in conjunction with the image. Text is not essential to all comic books, as there are comics that function without words, however, the text is often important in communicating the action of the story, and can communicate the passing of time. The combination of pictures and text to create meaning makes it difficult to negotiate a clear dividing line between the illustrations and the typed word. Typography itself can carry weight within the portrayal of the narrative, depending on how it is presented.\textsuperscript{135} However, Groensteen does not find the text to be of more importance that images to the

\textsuperscript{133} Wartenberg, 88.
\textsuperscript{134} Eisner, \textit{Graphic Storytelling}, 57.
telling of the story within comics, and suggests that to give it a higher significance form the image is to falsely assume that text is the main mode of storytelling. Pratt and Wartenberg have identified four aspects of comics’ textual elements: word balloons/speech bubbles, narrative text, sound effects, and pictures of words within the characters’ world. These different layers of text are embedded in a code of comics that silently presents itself to the reader. For example, the speech bubbles are invisible to the characters that utter them, but the same characters can read the text on street signs. Pratt explains that there is a tension between the texts within comics as it is able to depict sound (such as onomatopoetic words), which convey sound through visual indicators such as the tail of the word balloon indicating who is speaking, and be elaborated through word art. While the characters are aware of the sounds that the words indicate, they are not aware of the words as existing in their physical space.

The emphasis on this literary aspect is important in the debate between how time is portrayed to the reader. McCloud and Pratt believe that the text of a panel governs time. A single panel image, they argue, has no determined amount of time unless it is made explicit, such as including text that reads: “That evening”. The aspect of text is particularly crucial to the depiction of time as it indicates how long a particular action or situation takes to occur, based on the

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137 Pratt, 108. Wartenberg, 97. These would be parts of the character’s world, books, street signs, etc.
138 Pratt, 108.
139 ibid.
141 Pratt, 109.
reader’s own experience, with how long a conversation occurs in real-time.\textsuperscript{142} McCloud argues that the single panel comic, with no sequence of images, is not a comic but a cartoon. In contrast, John Holbo finds that there is a sequence of events that happens before and after the panel and the reader intuitively fill-in this missing sequence.\textsuperscript{143} Therefore within this single panel style there is an aspect of time within the work but the \textit{passing} of time is not depicted but implicit. It is due to their lack of an overt depiction of time that these single panel comics have been set aside in this thesis, as the juxtaposition of images is the focus of this study.

It is reasonable to describe comics as “language-like” or “written in visual languages” in that comics have their own rules in the construction of meaning.\textsuperscript{144} The construction of comics allows for the progression of time through the use of words in such a way that is not incorporated in traditional painting and drawing.\textsuperscript{145} According to Silvia Adler’s essay “Silence in the Graphic Novel,” a panel that is left without text intentionally alters the progression of the narrative as the reader spends less time on that panel, often speeding up the rhythm of the narration to create suspense or contemplation within the reader.\textsuperscript{146}

With comics there is a tradition of \textit{showing} through the image and \textit{telling} through the text provided. As McCloud suggests, it is often the text of the comic that often indicates the passage of time. The speech balloons in comics, Eisner

\textsuperscript{142} Pratt, 109.  
\textsuperscript{143} Holbo, 6.  
\textsuperscript{144} Meskin and Cook, xxxvi. Cohn, 2.  
\textsuperscript{145} Wartenberg, 100.  
argues, provide a pace or rhythm that the reader interprets through their own experience in the pacing of the spoken word. Eisner suggests that if the speech bubbles are created or sequenced incorrectly, the “flow” of a comic is affected: “the dialogue terminates the endurance of the image. The logic of this is that a protracted exchange of dialogue cannot be realistically supported by unmoving static images.” The text, if it is included in the panel, often determines the moment depicted in the narrative. Similarly, Pratt states that, “The literary dimension is also crucial in the governance of the passage of time in comics narratives.” For Pratt, if the panel stands alone, without any text, there is no determined amount of time portrayed in the panel for the reader to interpret. There is neither reference to the duration of an action from juxtaposing panels nor any textual information to indicate the length of time perceived within comics. If a single panel is portrayed with text there is a sense of time passing as the observer reads the written component of the single panel and applies an understanding of time passed in the panel based on pre-existing notions of how long a conversation or dialogue would take if acted out.

The text is able to add duration to a panel due to the observer’s preconceived notion of how long a described action takes. When dialogue is given, for example, the observer has an idea of the tempo of conversation and can

147 Eisner, Graphic Storytelling, 59.
148 ibid., 59 - 60.
149 Pratt, 109.
150 ibid.
151 ibid.
152 ibid.
begin to create a sense of time within that comic. Comics, for Pratt, are “temporally static” in that the temporal parameters placed on comics by the use of text are similar to literature; the understanding of time is dependant on the reader’s own pace for both novels and comics.\(^\text{153}\) There are other aspects of signs and symbols provided in comics that also alter the way in which the text of a comic is read. For instance, Pratt finds that the speech balloon is equivalent of literature’s “they said” and allows for clues into how the character is speaking or what they are thinking without explicitly stating either.\(^\text{154}\)

**Pictures, Panels, and Space**

The pictorial aspect of comics is essential to the medium. While comics may exist without text comics *must* have juxtaposed images to create a progressive narrative that takes place across time and through the physical space of a page. The debate among scholars in regards to the relationship between pictures, panels, and space, is one that is often discussed but with variation in the importance of each element. Discussing the views of Pratt, Carlin, Eisner, Groensteen, and McCloud I will demonstrate the similarities and differences in the interpretation of pictures, panels, and space.

Pratt defines three functions of the pictorial in comics: to establish a scene, provide narrative information such as mood, and to portray a character’s

\(^{153}\) Pratt, 110.
\(^{154}\) ibid.
emotional or mental state without literary text.\textsuperscript{155} Pratt’s definition proves useful in relation to Carlin’s views of reading comics as the juxtaposition of comics’ panels can simultaneously establish a scene while portraying the emotional state of a character and set the mood. Carlin says “…comics are not just \textit{read} as a sequence of images like words in a sentence or phrases in a paragraph. They are also \textit{seen} as one integrated image. As a result, the comics developed a ‘language’ appropriate to the visual culture of the time.”\textsuperscript{156} If Pratt’s definitions of the function of comics are combined with Carlin’s assertion that comics are seen as one integrated image, then the reader is able to draw connections between the mood, scene, and character in the instant that the panels are seen as one complete image.

Eisner argues in his book \textit{Comics and Sequential Art} that comics are a form of reading and this comprises the initial chapter of this work.\textsuperscript{157} Thierry Groensteen agrees with this viewpoint, considering, “Comics …as a language, that is to say, not as a historical, sociological, or economic phenomena, which it is also, but as an original ensemble of productive mechanisms of meaning.”\textsuperscript{158} Speaking to this element of language within comics, the layout then becomes important as it gives visual prominence to specific moments within a larger page. Groensteen finds that the rectangular panel in comics is used to mimic the

\textsuperscript{155} Pratt, 110.
\textsuperscript{156} Carlin, 68.
\textsuperscript{157} For more on comics as a form of reading please refer to Will Eisner, \textit{Comics and Sequential Art} (Tamarac: Poorhouse Press, 1990).
\textsuperscript{158} Groensteen, 2.
“hyperframe” of the page.\textsuperscript{159} The frame of the panel itself relates to the physical manifestation of the printed book or form of paper, demonstrating a visual relation between the panel and the space of the page. This aspect of as a network demonstrates that it may extend beyond the mere juxtaposition of the panels on a page, instead encompassing the physical comic book and the motifs portrayed in that particular comic as a whole. Groensteen addresses this all-encompassing network of comics in their discussion of \textit{Watchmen}.\textsuperscript{160} To simplify this paper only the concept of time in a network is examined, nevertheless I agree with Groensteen that there are many network relations that can be identified in comics.

Scott McCloud’s term for the combining of the images to create a narrative is “closure”.\textsuperscript{161} The term closure, as McCloud describes it, is “the observation of parts but perceiving a whole” and that we are only able to make sense of the given fragments due to our past experiences.\textsuperscript{162} Pratt disagrees with the use of this term, writing that “closure” already has a long history and associations in different fields.\textsuperscript{163} Instead, Pratt suggests we use the term “suture” from film theory in which, “…wherein the viewer brings order and unity to perception through an unconscious process of mentally ‘sewing’ the film together from disparate elements.”\textsuperscript{164} Although this term “suture” also sees ties to psychology, which adds an additional element to the term itself. Pratt is not keen

\begin{flushleft}
\textsuperscript{159} Groensteen, 46.  \\
\textsuperscript{160} ibid., 100.  \\
\textsuperscript{161} McCloud, 63.  \\
\textsuperscript{162} ibid.  \\
\textsuperscript{163} Pratt, 111.  \\
\textsuperscript{164} ibid.
\end{flushleft}
to associate this field of psychology with comics at this point in its scholarship.\textsuperscript{165}

While, the suture theory is used to understand spatial elements in film, I suggest that an added level of temporal elements within comics complicates the application of suture theory to this medium.\textsuperscript{166}

This time of closure is essential to this study of the gutter in relation to ANT, as it promotes “change, time and motion.”\textsuperscript{167} The concept of “closure” is here considered the linking force between different nodes within comics’ panels that form relationships to each other to create this network of time and space.

Hannah Miodrag also likens comics to a network relationship through the use of space in panel layout, stating:

“Space can also be used for dramatic and aesthetic ends: emphasizing action, dramatizing a spectacle, or assisting in creating a certain mood. The network model proves a valuable one here, illuminating how comics can create bridges between non-consecutive panels that are visibly co-present on the page, and conceptually co-present with all other panels throughout the text.”\textsuperscript{168}

Matthew Sutherlin questions how graphic novels are able to portray concepts to students in an art class. Sutherland states that it is the concepts portrayed in comics that allow for ideas to relate to one another in a network, a theory that he then compares to Deleuze and Guatari’s “rhizome.”\textsuperscript{169} Sutherlin proposes the term “space-time” to describe the concept of time as conveyed over one single image, such as individual panels, in which “The concepts of happening and becoming are

\begin{flushleft}
\textsuperscript{165} Pratt, 111.  
\textsuperscript{166} ibid.  
\textsuperscript{167} Pratt, 65.  
\textsuperscript{168} Miodrag, 140.  
\end{flushleft}
indeed not completely suspended, but yet complicated.\textsuperscript{170} The past, present and future, Sutherlin points out, are all laid out for us in comics as the reader is able to view the rise, climax, and fall of the action and because of this there is nothing that locates the “now” for the reader.\textsuperscript{171} This concept of all action happening at once relates this perception and relation of space and time to Albert Einstein’s theories on “space-time,” which is “the movement of an object of image through both space and time simultaneously.”\textsuperscript{172}

Some comics’ illustrators add a dimension to their work that breaks the fourth-wall that exists between comics and their implied reader. Carlin notes that Winsor McCay’s work had a specific technique that would encourage readers to move through the narrative as well as be aware of the graphic relationships and associations made on the page as a whole.\textsuperscript{173} Such techniques include that of composing the entire page with an overarching design that is separate from the narrative of the story, as well as that of panels growing and shrinking to mimic the variable size of his characters.\textsuperscript{174}

**Panel-to-Panel**

McCloud identifies six possibilities for the juxtaposition of images in panel-to-panel relationships: 1) moment-to-moment 2) action-to-action 3) subject-
McCloud notes that most American comic books follow an action-to-action format. The action-to-action panel sequence is one that shows the movement before, and the resulting movement after, a physical action has taken place. i.e. a baseball batter winding-up and at the end of their swing. McCloud explains the different uses of the various forms of juxtaposed panels, suggesting for example that action-to-action, subject-to-subject and scene-to-scene are used to quickly identify the scenarios of the story, and are the most prevalent in North American comics culture. Different forms of comics make use of different juxtapositions, such as Manga, which uses the aspect-to-aspect juxtaposition of images in which angles or views of the same scene, or moment, occupy successive panels, more than their American counterparts.

The aspect-to-aspect juxtaposition within comics is of particular interest to this thesis because of the way that time is portrayed between the two moments displayed. While most other forms of panel juxtaposition feature a linear progression in time, in the aspect-to-aspect panel layout the same moment within the narrative is able to occupy several different spaces on a single page. However, the reader imagines these fragments as one singular moment. It is important to note that the time in-between panels is much greater than the time

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175 Carlin, 37.
176 McCloud, 70.
177 ibid., 76.
178 ibid., 79
179 ibid.
depicted within the frame, and because of this, the majority of the story in a comic, if in a continuous narrative, goes unseen.\(^{180}\)

Although not all panel-to-panel relationships take place over time, as demonstrated in the aspect-to-aspect sequence, the presentation of multiple aspect-to-aspect establishing shots provides a stronger sense of the location or atmosphere. These images accomplish this by providing a network of associations.\(^{181}\) The panel layout also determines what scene or shot is given significance, and the type of frame and gutter also acts as a signifier that aid in the telling of the narrative.\(^{182}\) It is Scott McCloud’s concept of “closure” which allows the reader to imagine the elapsed time in the gutter (provided the panels are arranged successfully).\(^{183}\) Layouts that do not have frames, but consist of images, that fade into the gutter space, do not portray the same perception of time as panels that are framed. The unframed panel has a more nebulous sense of time whereas the framed panel signals a more overt time.\(^{184}\) McCloud argues the simplified pictorial element found in comics allows the reader to engage in the narrative because they can identify with a more simplified depiction.\(^{185}\)

While McCloud’s work on comics promotes the sequential ordering of panels, Cohn’s work moves beyond linear modes of narrative, to promote the concept of a network of associations as the central defining feature of comics. In

\(^{180}\) Pratt, 113.
\(^{181}\) ibid.
\(^{182}\) Postema, 29.
\(^{183}\) Pratt, 112.
\(^{184}\) ibid., 40.
\(^{185}\) McCloud, 36.
The Visual Language of Comics: Introduction to the Structure and Cognition of Sequential Images, Cohn specifies three approaches to analyse the relationship between time and space in comics. First, Cohn identifies that panel transitions work in a “global view,” or from the perspective of comics’ entirety, rather than the sequential ordering of images.\textsuperscript{186} The second type of transition Cohn titles as “promiscuous transition,” echoing Groensteen’s previously mentioned notion that all panels of comics are related.\textsuperscript{187} Essentially, the “promiscuous transition” is the relationship between panels that are not directly juxtaposed but relate to each other on the page as a whole.\textsuperscript{188}

The final narrative structure Cohn describes is one of “general cognitive scripts and schemas,” which analyzes how depicted situations only make sense if the reader is familiar with the “specific script” that the action depicts.\textsuperscript{189} However, while Cohn sees this as a potential issue for misconception, Miodrag finds that this is simply the nature of the medium, and that it is expected that a reader will not pick up on every relationship built between the panels.\textsuperscript{190} In this way, Miodrag’s view of panel relationships echoes that of ANT’s concepts of a network being encompassing of both larger networks and smaller localities. Therefore the associations traced by the reader, whether there are more or less

\textsuperscript{186} Cohn, 67.
\textsuperscript{187} ibid.
\textsuperscript{188} ibid., 68.
\textsuperscript{189} McCloud, 68.
\textsuperscript{190} Miodrag, 128.
associations created, are still working within a network of associations, no matter the scale of the network that is created.

**Silent Comics**

Comics without text are commonly known as “silent” comics. These comics produce meaning and narrative like comics with dialogue and are therefore the defining feature of comics, as comics can make meaning without text but a comic’s text cannot make meaning without the image. Silvia Adler looks at the aspect of “silence” in comics in relation to pauses in literary text. Adler explores how the reader must use their powers of observation and deduction to interpret the narrative of comics, which produces a more emotive response in the reader.\(^{191}\) In regards to the gutter Adler states, “Silence between the frames is an invitation for the reader/observer to construct meaning within a sequence based on premises (of a textual or a visual kind).”\(^{192}\) In these instances the reader is only shown the action of the narrative, therefore giving primacy to image over the written story.\(^{193}\) Eisner says of the silence within comics, “In depicting a silent sequence of interaction, the comic teller must be sure to employ gestures and postures easily identifiable with the dialogue being played out in a reader’s mind.”\(^{194}\)

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\(^{191}\) Adler, 2278-2279.
\(^{192}\) ibid., 2279.
\(^{193}\) ibid., 2280.
\(^{194}\) Eisner, *Graphic Storytelling*, 57.
Comics and Film

A discussion of the comparison between temporality, structure, comics and film will illuminate aspects of comics’ structure and the network created between time and space in comics’ narrative. Comics and film emerged as mediums at relatively the same period, both as products of mass culture, featuring verbal and visual components, and are based upon portrayals of temporal succession of images to produce an illusion of movement and time passing.\textsuperscript{195} The aspect of film requiring attention in relation to the topic of this paper is its progression and portrayal of time. Eisner finds that while film moves in real-time and audiences have grown accustomed to the pacing of narrative portrayal in a movie, this pacing is different from the pacing an audience experiences while reading literary and graphic texts.\textsuperscript{196} In Eisner’s use of the term \textit{graphic narrative} he defines it as “A generic description of any narration that employs image to transmit an idea. Film and comics both engage in graphic narrative,” with comics “fill[ing] the gap” between text and film.\textsuperscript{197}

Studies of the relationship between comics and film are made more complex due to film’s established scholarship/methodology, which often becomes the source for academic study seeking a framework for understanding comics. While this allows comics to be placed on a similar scholarly level as their film counterparts, it cannot encompass areas of the comics that are unique to that

\textsuperscript{195} Pratt, 113.
\textsuperscript{196} Eisner, \textit{Graphic Story Telling}, 5.
\textsuperscript{197} ibid., 5-6.
medium. Pratt sees comics and films as similar in that they both use image and word, and that both comics and films tell stories.\textsuperscript{198} However, other scholars, and Pratt himself, reject the equivalence of the two, arguing that comics have a distinct visual language that is separate to the narrative techniques of film.\textsuperscript{199} I agree with Pratt that there is a quality in comics that differs from other mediums, and here I will make a comparison between some scholars as to the medium of film and that of comics.

Eisner suggests that audience is captivated differently in the mediums of comics and film, since film is “unanticipated” as the audience is unable to view the narrative out of sequence, whereas comics have a layout of the story on the page for the viewer and it is up to the viewer to read comics in this prescribed manner.\textsuperscript{200} Because of this, comics are less able to surprise the viewer than film from panel-to-panel and therefore comics use other methods to keep the viewer engaged.\textsuperscript{201} Within a film, Eisner states, one cannot contemplate a single aspect of the narrative, as the audience is forced to experience the story through the time of the narrator; based on the mechanization of film.\textsuperscript{202} Since film is meant to be played at one specific speed it is much more difficult to ignore the pacing of a movie than that of comics.\textsuperscript{203}

\begin{itemize}
\item \textsuperscript{198} Pratt, 107-108.
\item \textsuperscript{199} ibid. 108.
\item \textsuperscript{200} Eisner, \textit{Graphic Story Telling}, 52.
\item \textsuperscript{201} ibid. Eisner suggests that the narrative should then shock the characters within comics rather than attempts to surprise the audience.
\item \textsuperscript{202} ibid., 69.
\item \textsuperscript{203} ibid...
Groensteen’s terms gridding (or *quadrillage*) the division of comics narrative into specific units refers to chronophotography and the precursor of cinema. He identifies it as showing the essential difference between cinema and comics: “…it is with this essential difference that comics begin where cinema ends: the nature of the finished form does not allow the illustrator to produce images without some preliminary knowledge of their location in space and their location in the story.”\(^\text{204}\) While the comics’ artist attempts to provide a rhythm and pacing to comics’ narrative, ultimately the audience internally implements the pacing themselves.

Eisner not only compares comics to films but also compares them to the process of communication found in literary text. When comparing literature against comics Eisner notes that in the former the reader is involved in recalling associations to create a narrative through the language with which they are familiar.\(^\text{205}\) He compares this mode of recollection to the language of comics, which he finds to have a “less demanding” “acquisition” process as the image is provided for the reader and therefore the reader, is meant to participate in ways other than interpreting the text alone.\(^\text{206}\) When discussing the process of reading the image and text components of comics Eisner states that, “reading the imagery requires experience and allows acquisition at the viewer’s pace.”\(^\text{207}\) Experience informs the audience that separate scenes are linked together to create a single

\(^{204}\) Groensteen, 144. 
\(^{205}\) Einser *Graphic Storytelling*, 69. 
\(^{206}\) ibid. 
\(^{207}\) ibid.
narrative, both in comics and in film. McCloud argues that film does this as well, but less frequently. 208

In terms of the movement through space which relates to the concept of space and time discussed in the previous section, Pratt points out that comics can only allude to motion through the use of symbolic lines that hint at movement, whereas film is able to portray movement due to the speed at which the frames pass before the viewer’s eye. 209 There is a difference in the physical space of the object as the film screen only portrays one frame, or moment, at a time while the physical layout of panels on a page allows for a different understanding of space in relation to narrative and time.

The idea of “variable framing” is used both in comics and film, in that aspects of a room will be given emphasis to convey ideas within the narrative, such as a close up of a clock to portray the passing of time. 210 Pratt points toward fellow scholar Greg Cwiklik whose work finds that this idea of “closure” in comics can be found within film through the form of montage. 211 Barbara Postema writes that it is the layout of comics that separates comics from the field of film and animation, and Bart Beaty finds the same idea of “closure” between shots similar to that gap between panels. 212

208 McCloud, 69.
209 ibid., 113.
210 Pratt, 111.
211 ibid., 114.
212 ibid., Postema, 30.
Film has also influenced the way in which the contemporary reader interacts with comics. While both forms have words and images, Eisner states, “Film buttresses these with sound and the illusion of real motion.”213 One of the key differences between film and comics that Eisner addresses is that film attempts to mimic the real experience for the audience, while comics attempt to narrate this experience.214

For film, the medium occurs in real-time and therefore an observer cannot experience the film faster or slower without the aid of speeding up the medium to experience the piece in a way that is other than the intended viewing experience for an ideal reader or viewer, i.e. as the director intended.215 Unlike film, which requires the viewer to experience the story at twenty-four frames per second, the pace of reading a comic is left ultimately to the reader, who is able to linger on the imagery of the illustrator.216 Additionally, the pace of reading a comic is left ultimately to the reader, as they are able to linger on the imagery of the illustrator.217 While the comic book has a wide range in page layout, the film genre is often limited to a certain framing device, as it needs to be formatted for the average television or screen projection in a cinema.218

Another aspect of comics that differs from film is that comics can portray simultaneous actions fairly easily since the speech bubbles indicate if someone is

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213 Eisner, Graphic Storytelling, 71.
214 ibid.
215 Pratt, 109-110.
216 ibid., 110.
217 ibid., 115.
218 ibid., 114.
speaking over another while still being able to discern what the characters are
saying, this is often lost in spoken word productions in film as the words heard on
top of one another often get lost for the listener.\textsuperscript{219} Ultimately, Pratt suggests that
the significant difference between comics and film lies in the difference in the
physical object itself.\textsuperscript{220}

The following chapter will use three case studies to illustrate how several
comics use text and panel relations to create this network of associations. I will
then proceed to examine the associations the panels have to one another when
viewed simultaneously and how they create multiple aspects of time.

\textsuperscript{219} Pratt, 115.
\textsuperscript{220} ibid., 114.
Chapter 4: Case Studies

This chapter will apply Actor-Network Theory to three case studies to illuminate the relationship between panels and their portrayal of time through space. The case studies include Alan Moore and Dave Gibbons’s *Watchmen*, Will Eisner’s *A Contract with God*, and *Violent Cases* by Neil Gaiman and Dave McKean. A brief introduction to the plot will introduce each case study, followed by an analysis of the panel layout style. The layout will then be analyzed through a discussion of how the panel layout creates a sense of time passing for the reader as one moves from panel to panel.

The case studies exemplify differences in approaching panel layout. I will begin by analyzing a standard layout, Alan Moore and Dave Gibbons’ *Watchmen*, which features equal sized panels that have a border and are separated by a gutter. The panel layout of *Watchmen* will be used to understand how the rhythm and pacing of a comics’ narrative unfolds. The tracing of actors in the even panel layout communicates a progression of time within the gutter space. Then I will analyze how a reader’s perception of time changes as the panel layout becomes less consistent in terms of spacing and framing. To exemplify this relationship between time and panel layout I will use Will Eisner’s “A Contract with God”, a short, semi autobiographical story that (often) lacks frames around its panels. This
aspect of the panel layout makes the passing of time less structured than its counterpart in *Watchmen*. Additionally, the association traced in Eisner’s illustrations extend themselves toward the reader, occasionally placing the reader in a first person perspective. From Eisner’s graphic novel, I will move into the last case study, a discussion of how the panel layout itself can be a reference for time. The final case study, Neil Gaiman and Dave McKean’s *Violent Cases*, will analyze how the use of panel layout can articulate how we experience time, both in the present moment and in our reflection on memories. *Violent Cases* often confuses panels and collage to provide an array of images that loosely relate to one another to portray the concept of memory. Through these case studies I will demonstrate how ANT can be used to understand how time is portrayed in comics, as well as how the panel layout’s simultaneity effects the reader’s associations and reading of the text.

*Watchmen*

*Watchmen* was published as a series of twelve comics in 1986 by DC and later combined in a single graphic novel volume. Alan Moore wrote the graphic novel while Dave Gibbons acted as illustrator and letterer. *Watchmen* utilizes the superhero genre, while complicating the archetypal good against evil story arc that had previously defined this genre. The story follows several different characters and their lives once they have retired from their careers as masked superheroes. *Watchmen* uses a very standardized layout for a large portion of its composition. The panel layout is a very neat, vertically-oriented grid that often
features a three-panel by three-panel layout. It is because of the consistency in the paneling style that I have chosen this comic as an example through which to demonstrate the relational forces of Actor-Network Theory. When the grid layout is obstructed, for example when one panel is larger than the others or when text is inserted into the gutter, the action that takes place within that moment of the graphic novel is highlighted. The surrounding panels have a relationship to each other that then emphasizes themes found throughout the work as a whole, rather than the chronological order of the narrative. While the layout for many comics is equally important and considered as an aid to the telling of the story, the fact that *Watchmen* often only changes one element of the grid at a time makes is a prime example for a comparative study of the regular pacing of a narrative and the highlighted action or theme pervasive throughout the graphic novel.

The lives of these superheroes after they have retired from their crime fighting days is the central focus of *Watchmen*. The story is complex and multilayered, following the various characters’ personal lives and relationships while carrying the weight of contemporary social issues of the Cold War. Sabin attributes part of the success of this comic and several others to the creation of the single bound addition that was marketed under the term “graphic novel.” By selling the finished series in this manner publishers were able to remove the story

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221 Sabin, 165.
from the juvenile term of “comics” and instead associate it with the higher literary art of novels.\textsuperscript{222}

David Gibbons acknowledges his use of the grid style as extremely important to the telling of Moore’s story.\textsuperscript{223} He says that the panels were made to be the same size so that the comic’s pacing would be equal throughout the narration of the story, mimicking the even pacing of film: “Because the frame or the proscenium arch is always the same, you block it out, and get sucked into the picture that much more quickly.”\textsuperscript{224} The proscenium arch in the case of comics is seen in the regularity of the panel layout, which delivers the content of the story and does not draw attention to itself in its delivery of the narrative.

Barbara Postema claims that this format of panels framed by black frames and separated by blank space in a grid-like pattern is the most traditional of framing styles used in comics.\textsuperscript{225} The panels are framed, and separated by the visible blank space of the gutter. This layout, she posits, allows for a strong sense of sequence in the work.\textsuperscript{226} To begin this case study of Watchmen I identify two different types of panel-to-panel relationships. These panel-to-panel relationships highlight different ways of reading both comics’ narrative and the page layout as a whole. The first analysis is of a moment-to-moment sequence featuring a “silent” interaction between Edgar Jacobi and Rorschach. The second is an analysis of an

\textsuperscript{222} Sabin, 165.
\textsuperscript{223} ibid.
\textsuperscript{224} ibid.
\textsuperscript{225} Postema, 30.
\textsuperscript{226} ibid.
action-to-action panel sequence. I end the analysis of *Watchmen* with an analysis of the external fictitious documentation that accompanies each chapter to relate the composition of the comic to a larger network of associations in which the reader participates.

![Image of Watchmen panel]

*Figure 7. Watchmen. 1986. Chapter 5 pg 4. Original by Alan Moore, Dave Gibbons, and John Higgins.*

In the moment-to-moment transition of *fig. 7*, the time that passes in the gutter is very minimal. The tension that is created by using the moment-to-moment style of paneling can be seen clearly here as Edgar Jacobi slowly turns to face Rorschach. The moment-to-moment paneling style slows the pace of the comic, as the older character looks slowly at Rorschach, then at his own gun, and back at Rorschach. These panels are “silent”, as they have no dialogue, but they are placed under a banner of a large, bold font that exclaims “FEARFUL
SYMMETRY.” The text acts as both the title of the chapter and as a reference to Rorschach’s mask of symmetrical inkblots. The viewer intuits the information of what happens in the time passing between these three panels, but due to the lack of dialogue the reader must interpret what the characters are thinking and must, according to their ability, “read” the repeated scene over several panels and interpret this as sequential moments close to each other in time.

The action of these panels demonstrates two relationships of the progression of time within the space of the layout. The first is the straightforward progression of time within the narrative that exists between the evenly spaced panels characteristic of Watchmen (fig. 8). The rhythm portrayed in these images is even, and each panel can be seen as a node or select “moment” within the narrative. The second aspect of time portrayed in these images is that of the text provided in-between the panels stating “Fearful Symmetry” (fig.8). This text inhabits the gutter space and therefore happens outside of the action of the characters. This is the title of the chapter, however, it is placed four pages after the chapter opens. The text therefore has a stronger association with the panels that surround it, than with the panels on the opening page of the chapter. The text influences the way the reader interprets the symmetry found in Rorschach’s mask above the text and also with the three panels below. The panels of this section move through time linearly, but the page layout takes into account that all of the panels will be seen at the same moment. This relates directly to the tenant of

227 Additionally the text “FEARFUL SYMMETRY” refers to William Blake’s 1794 poem The Tyger.
ANT, which claims that any given system works with given nodes. The actors here are components of the layout, when one reads the panels a natural tracing of the actors’ takes place of both the chronological sequence and the page as a whole. The reading of the panels can happen several ways. The first tracing of the actors is inline with the narrative, Rorschach’s confrontation with Jacobi, the second being the connection between the text in the gutter and the encompassing panels. What the reader then is interpreting is both a progression through time in alliance with the linear time of the story, and the additional association based information given by the chapter’s title. All of this information is perceived simultaneously, and it is by understanding these various levels of associations that a decentralized network of visual communication can be experienced. The last three panels of the page set the standard, rhythmic pace for the rest of the scene (fig. 9).

Figure 8. Depiction of multiple dimensions of network associations. Diagram by Tara Akitt. Original text and art of Watchmen by Alan Moore, David Gibbons, and John Higgins. 1986.
Hannah Miodrag’s *Comics and Language* takes the concept of text in the pacing of comics literally, and finds that comics as a whole can be considered a system of language. The concept of comics as a language itself is part of the importance of sequentiality in comics. Miodrag states that the distinctions between comics and language “are particularly pertinent to the issue of sequentiality as it is the recurrence of these signs, drawn into resonant networks that permeate the text, which allows them to be read.” She continues by stating:

Recurrent visual devices such as these come to make sense gradually, with close attention and sometimes even repeated readings eventually teasing out the nuanced arthrological connections that braid every panel ‘potentially if not actually’ to every other, and the iteratively vest non-iconic visual forms with new significance.\(^\text{228}\)

Miodrag examines *Watchmen* and finds that the repetitions in the visual language of the panels, especially in the composition of the form of the subjects, give visual

\(^{228}\) Miodrag 137.
cues that direct the audience to recall a previous scene and draw connections between the events of the story.\textsuperscript{229}

A particularly action-heavy sequence is found on pages fourteen and fifteen of Chapter Five of *Watchmen* (fig. 10). This scene shows Ozymandias as he engages in a physical battle with an intruder in his company’s building. The action happens over a two-page spread that is again without dialogue. In this action sequence the page layout is broken to give a greater emphasis to the action of the scene, which gives a weightier physicality to the events that unfold. Silvia Adler, in her essay “Silence in the Graphic Novel,” emphasizes that the silent frames help to speed up the pacing of the story, as the reader will spend less time on the frame since the picture is perceived instantaneously.\textsuperscript{230}

This page also reads from top to bottom and then diagonally across the page, as the bullet from the intruder’s gun ricochets off of Ozymandias’ weapon, leading the eye diagonally up across the body of Ozymandias in the middle panel, himself in a diagonal position, the eye is lead in a diagonal from his leg to the raised weapon held above his head. This then leads the eye up again to the top panel to examine the rest of the action, and then down the right side of the page.

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\textsuperscript{229} Miodrag 137.  
\textsuperscript{230} Adler, 2281.

The reader can follow the narrative through this two-page spread, and the reader is effectively transported through the rapid pacing of the panels as the silent action aptly portrays a physical struggle. The vertical central panel breaks the tempo of the fight, highlighting that specific moment when Ozymandias gains control of the struggle. Again, the even grid layout of the comic provides a rhythm for the reader and provides a recognizable pattern in the passing of time. This also adds emphasis to the narrative through the breaking of a specific rhythm of the panels. Additionally, the symmetry of the two-page spread shows the reader an instantaneous relationship of the entire struggle. The simultaneity of the event means that it can be conceived both as a whole and in its sequential juxtaposition.
of separate panels, making the panel relationships a multilayered network of associations.

Finally, one compositional aspect of Watchmen that is hard to ignore is the fictitious external writings that accompany this comic. Between each chapter Alan Moore has placed additional written material from the world of Watchmen. These fictional, complimentary texts include an excerpt from an autobiography, documents on Dr. Manhattan, news clippings, etc. These textual additions provide a moment to step outside of the chronological unfolding of the plot, and the proscenium arch of the repeating panel, allowing for the reader to participate in the world the characters’ inhabit.

From another perspective Postema writes that the placing of a single panel on a page makes the medium closer to woodcut novels.\textsuperscript{231} The turning of the pages to connect the panels in works that use the single panel on a page draws attention to the physicality of the book.\textsuperscript{232} Watchmen uses a sense of play between the story of the main characters, who exit within a “present” time of the narrative (as they exist within the panel), and a play with their past, which exists in these external pages. While the strong grid layout of Watchmen carries the reader through a structured pacing of time, these peripheral materials exist as a memory of a time prior to the narrative. This aspect of present and past action is found within both this text and the following two case studies.

\textsuperscript{231} Postema, 33.
\textsuperscript{232} ibid.
“A Contract with God”

When Will Eisner first published *A Contract with God* in 1978, he became the first comics creator to introduce the term “graphic novel” to describe his writing and illustration style.\(^{233}\) *A Contract with God* demonstrates Eisner’s interest in, and influences from, the underground comix movement.\(^{234}\) The dark content of the four vignettes that compose *A Contract with God* led the way for the subsequent serious contemplation of comics as a sophisticated art genre, and triggered a resurgence in the popularity of mature comics.\(^{235}\) *A Contract With God: And Other Tenement Stories*, is a collection of four short comics based on a Hasidic Jewish community in New York City in the 1930s. The stories revolve around dark themes of loss, jealousy, and greed. The first story, and the title story, “A Contract with God,” is a semiautobiographical text, following the life of a man whose teenage daughter passes away, and traces how this event affects the lives of those that live in the Jewish community of Dropsie Avenue.

All four of the comics in *A Contract with God and Other Tenement Stories* have a less rigid format than that of *Watchmen* as Eisner’s panel layout frequently shifts between full-page illustrations and loosely defined panels. Eisner’s works in this collection often plays with the page layout, and the experimental panels of these stories make the portrayal of time vastly different from the even pacing of

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\(^{233}\) Duncan and Smith, 24.  
\(^{234}\) ibid., 36.  
\(^{235}\) ibid., 24.
action in *Watchmen*. My approach to these two comics will be to question how the change in the gutter space from *Watchmen* to *A Contract with God* effects the portrayal of time and space for the reader.

In the preface to the 1978 publication of *A Contract with God*, Will Eisner states that in the telling of these stories, and in his attempt to capture realism, he set aside space and format so that the frames and panels found in this comic would evolve from the narrative itself. Eisner states:

“For example, in many cases, an entire page is set out as a panel. The text and the balloons are interlocked with the art. I see all these as threads of a single fabric and exploit them as a language. If I have been successful at this, there will be no interruptions in the flow of narrative because the picture and the text are so totally dependent on each other as to be inseparable for even a moment.”

An example of Eisner’s combination of words and images to create a single feeling within the narrative is seen on the first page of “A Contract with God”, the first of the four comics (*fig.11*). It is in this first page that the break from the traditional comic book format can be seen. Here Eisner uses a full-page composition to illustrate the scene of Frimme Hersh walking home from his daughter’s funeral in the rain. Eisner gives weight to the lettering of the text as the “omnipresent” narrator. The type takes on a rain-soaked appearance and is larger than the image of Frimme Hersh himself.

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236 Eisner, “Preface” to *A Contract with God*, pg ii.
All day the rain poured down on the Bronx without mercy.

The sewers overflowed and the waters rose over the curbs of the street.
It is not until another character enters into the narrative, “Missis Kelly,” or Mrs. Kelly, that a frame is used around the illustration. In this image the omnipotent narrator’s voice is broken for dialogue between the characters (fig. 12). The dialogue contained within the panel separates the action from the narrator, bringing the reader into a specific time and space in which the action occurs. In this image the doorway seen on the page directly before the scene with Missis Kelly brings the reader into the building in which Frimme lives, inviting the reader into the story, and the text addresses the reader directly. In this page the
reader is immersed in the story and the moment of time portrayed depends on the mode in which the reader interacts with the first person depiction of the scene. In this case the reader becomes an actor within the narrative, and a connection between the reader’s physical space and the space within the graphic novel is created.

Postema writes that Eisner’s style of frameless panels limits the number of panels that can be presented on a page because of the use of large gutters to separate the panels from one another.\textsuperscript{237} She sees this as Eisner’s way of breaking with past comics traditions and getting rid of past boundaries, as well as distancing this work from his earlier work \textit{The Spirit}.\textsuperscript{238} Of these frameless panel layouts, Postema writes, “With the absence of formal frames and gutters the draw from panel to panel is reduced. The weakened gutter function slows down narrative pacing and makes the look of the page more organic.”\textsuperscript{239} This slower pacing of the comic is a result of Eisner’s frameless panellayout.

The enclosed frame on the adjacent page removes the reader from their moment within the story. In the few pages before pages five and six there is no indication of how much time is passing in the graphic novel.\textsuperscript{240} As the character walks through New York City, the reader is left to his or her own experiences of loss, associating the action of walking through the rain to Frimme’s own loss and

\textsuperscript{237} Postema, 38.
\textsuperscript{238} ibid., 39.
\textsuperscript{239} ibid.
\textsuperscript{240} I will use the term graphic novel for “A Contract with God” because it is described as a graphic novel by its author, and for simplicity’s sake.
rain-soaked journey. These first five pages are left as single-panel page layouts: without frames bordering the images, a blank space is left around the illustrations from which the images emerge. As the reader enters into the story, into Frimme’s interactions with other characters and with the world around him, the use of several panels on one page begins to appear.

Actor-Network Theory allows us to see how this work prompts the reader to draw both from the images and from the text to understand the passing of time between the moments depicted. The single panel layout used at the beginning of the story allows for a loose association between the panels. The reader must physically turn the pages to move from panel to panel. Unlike the previous example of Watchmen, Eisner’s graphic novel provides greater gutter space, not only through these opening pages of single panel layouts, but continuously throughout his work as he essentially does away with the frame of the panel all together. The first few pages read like an illustrated novel or picture book. Essentially, most of the story could be understood without the use of images, because the text of the narrative is given such importance that the relationship the reader has with the illustrations are minimal.

And finally a combination of changing panel layout and framing in Neil Gaiman and Dave McKean’s Violent Cases: Words and Pictures, a Graphic Novella creates a multileveled method of unwritten codes for the interpretation of time.
**Violent Cases**

The comparison of these comics highlights the question of how the panel itself is able to signify a specific time and location. In Gaiman and McKean’s *Violent Cases: Words and Pictures, A Graphic Novella*, first published in 1991, a man recounts an interaction he had with an osteopath who was speculated to be part of a seedier plot in relation to Al Capone. The story jumps between the events that lead to the osteopath’s death and the present day storyteller. The action that happens in the present is always portrayed in rigid, vertical frames, with gutters splicing the main character over several panels. Arguably, with the even division of the main character when seen in the present tense, the gutter space indicates the passing of even seconds of the present moment. The panels could be said to be essentially like film stills, indicating that the time passing in the gutter space is almost instantaneous or minimal, split-second moments, between panels. The perception of a memory is portrayed in a fragmented manner. The passing of time is made up of disjointed images that demonstrate that the concept of time passing within a memory does not exist. A memory is instantaneous when recollecting an event as the beginning, middle, and end of the event are already known and exist all at once within a person’s mind. Since all instances of an event are already known in a memory, time does not progress linearly within the text of the graphic novella.

As the story enters into the space of recalled memory, the panels begin to shift from the standard layout of frame surrounded by a white gutter. This
distinction between the present and the depiction of the narrator’s memory can be seen as the panels begin to overlap and stretch outside of the “present” time that is depicted in the standard panel layout at the top of the page (fig. 13).


These images inside the panels show blurry shapes and disjointed figures to demonstrate the hazy nature of memory. They emerge from a black background and are presented as his memory of the world when he was a young boy. By using the panel itself to indicate which scenes occur in the present and which scenes are the narrator’s recollection of events, a network of associations are made between
the panels, both on the page and through the duration of the comic itself. *Violent Cases* exemplifies that while the story might be told through the sequential ordering of images, meaning comes from the layout of the page as a whole.

The following page shows that there is some clarity in the memory form a more recent memory, as he asks his father about the osteopath’s appearance (*fig. 14*).


Again, a steady grid pattern is given to the panel layout, with the details of his father’s face and the digital clock behind him being clear in the illustration. This indicates that the narrator remembers the time of the event, but the rest of the
room fades into a fog of white, indicating that the setting is unclear. After these pages, when the story enters into the main character’s memory, the panels do not follow any type of grid patterning; instead a system of inserts is used to create a collage of a story (fig. 15).


These different types of panel-to-panel relations do not always consist of the same space-time relationship when they appear, but they influence the pacing of the story. They demonstrate the principle of comics that all instances of time within the narrative appear simultaneously. This is most evident with McKean’s portrayal of a memory. He illustrates the character’s foggy childhood memory with the associations the character has, both real and imagined by the distant memory. This two-page spread ultimately demonstrates that when reading comics the associations made between the panels can be more than simply linearly
progressive, as comics work to produce meaning through decentralized associations between the images presented.

Additionally, ANT promotes large-scale networks as well as networks restricted to a small locality or instant, and insists that all networks are given the same importance. This means that although the collage effect used on these two pages is unique in their appearance to the comics as a whole, they are just as relevant and worthy of investigation as that of the whole. If the lower portion of page eight is considered on its own, the reader can study the framed panel and the images that are not overtly linked together but are read in relation to each other due to their proximity. The relationships made in this insert may be contained to this one panel; they do not need to relate to larger networks of a narrative that extend outside of the world of the comic for their use to still holding meaning. In the case of these photographs in the panel, the larger network of where the photographs originated from, if they are taken from a history outside of the comic book, does not matter. The comic works together to produce both the sequential narrative while depicting a select moment within the narrative to bring meaning to the panels as they exist on the page simultaneously.
Conclusion

It is Matthew Sutherlin’s comic on the comic medium, “Down the Rabbit Hole,” that inspired my initial examination of the relation of time in comics through a semiotic approach and to understand the complex relationship between the panels of comics. Actor-Network Theory as a mode of analysis for the relationship between panels in comics, is an excellent, theoretical model that best demonstrates how a physical and semiotic aspect of time and space is depicted in comics, a topic that has been explored in recent comics theory but has remained separate from other studies of space and time relationships. Let me reiterate the relevant relationship between ANT and comics’ use of framing and panelling by returning to the concept of a decentralized network. Both the theory and the comics production technique have the commonality of producing meaning through decentralized associations, one visually and one theoretically this has aptly been shown in my case studies and my explanation of ANT.

This thesis utilizes concepts drawn from ANT to analyze perceptions of time in the structure of panel layout within comics to address Pratt’s question of the gutter space. The design of this investigation traces the history of the panel, introduces the method of ANT, and applies the methodology to several contemporary case studies for further clarification. Beginning with an overview of

241 Sutherlin, 21.
the development of panel layout this thesis investigated how notions of time and narrative have been challenged throughout the medium’s history.

This method of investigation worked by first providing a brief introduction to ANT to give background information on how a network of associations is understood in reference to science and technology studies. By applying ANT concepts to preexisting, contemporary theories of comics, and by exemplifying the correlation between ANT and comics theory through the three case studies, this thesis successfully demonstrates how a network relationship exists in comics’ panel layout with regards to time and narrative. The three case studies used in this thesis give ample evidence to prove how the creative use of panel layouts have been strategically used by comics creators in their various arrangements to convey a highly sophisticated and often structured, decentralized depiction of time. ANT is a perfect theoretical model to apply to comics as it reflects both the construction and deconstruction of space and time.

The use of ANT to comics’ panel layout provides an understanding of built associations that rely on each other in the production of meaning making. The application of ANT to comics allows for the gutter to act as a linking force between the panels of the page, or the nodes of a network. While the frame, panels, and gutters are all interrelated it is essentially the separation of action on a page that creates the network. The use of ANT in an analysis of time and narrative for comics’ construction is particularly pertinent because of its emphasis on human and non-human experience. This thesis was an examination of how
different layers of time are created and portrayed to the reader, given that the medium works in a method that displays multiple aspects of the narrative simultaneously.

This thesis has primarily focused on the analysis of the process of associations made between time and space, both for the reader and for the action of the characters. It demonstrates how comics’ creators utilize the formal elements of the comics’ panel layout to manipulate and control the portrayal of time in its multiple manifestations. Whether it is self-referential, as in *Little Sammy Sneeze*, or in the depiction of a cinematic, non-invasive, movement of time as seen in the *Watchmen*, the panel layout constructs and deconstructs meaning.

Returning to Pratt’s question of how comics are able to construct and deconstruct meaning while simultaneously displaying a multitude of places, this thesis exemplifies that the comics’ panel relationship should be understood through the structure of a network. The use of ANT has been a theoretical model that has successfully interpreted these visual and textual constructs. Pratt’s concern with the space of the gutter asks that the reader consider this lack, or between space, as one that is a process of meaning making. This process is also that of a network, populated by actors who together produce the peculiar temporality of the comics form.
Bibliography


Appendix

Terms

Will Eisner defines comics as, “The printed arrangement of art and balloons in sequence, particularly as in comic books.”\(^{242}\) The word comic itself has become one that is all encompassing, and can be compared to the term “jazz”, which covers a wide spectrum of creative production.\(^ {243}\) While it is difficult to define the various comic arts, as the terminology and the scholarship around the medium is widely debated, the following definitions will suffice for the purposes of this paper.

**Comic Book:** Comic books are an extension of the comic strip form as it again uses a purposeful sequencing of images (and sometimes text). The comic book has a longer and more complex story arc that develops over several pages. The comic book medium allows for a greater range of panel configuration and colouring than is found in the comic strip.\(^ {244}\) Duncan and Smith suggest that the best way to understand the relationship between the comic strip and the comic book is that they both use a similar “vocabulary” but they are different “languages”.\(^ {245}\) Henry John Pratt would argue that comics have literary aspects

\(^{243}\) Carlin, 170.
\(^{244}\) Duncan and Smith, 6.
\(^{245}\) ibid.,
but are essentially pictorial while Thomas E. Wartenberg writes that the images and text provided contribute equally to the story.\textsuperscript{246}

**Comic Strip:** The comic strip is to be understood as a print medium that has a purposeful sequencing of images, and sometimes text, that are arranged in a single tier. The strip generally has a simple panel layout and is often produced to be entertaining and/or insightful.\textsuperscript{247}

**Graphic Novel:** The difference between the graphic novel, a term coined by Will Eisner in 1978, and the comic book is difficult to negotiate since they share a similar format. The term “graphic novel” is used to indicate that the content of the story is for a mature audience and the term is often used in the place of the term “comic books” to distance the work from juvenile connotation.\textsuperscript{248}

**Narrative:** The final term to be defined is “narrative.” For the purposes of this thesis paper a narrative is a sequence of events that follows a particular order.\textsuperscript{249} Eisner recognizes that there are two ways to convey a story: language and/or the visual and that “empathy” is the product of an audience imagining a sequence of

\textsuperscript{246} Pratt, 107. Wartenberg, 97.
\textsuperscript{247} Duncan Smith, 6. There are, of course, exceptions to this definition. Web comics follow similar guidelines while not being a printed medium, and some comic strips are simply not funny. It is with this definition, however, that we avoid also including sequential mediums such as instruction booklets and other educational material into this already unwieldy field of study.
\textsuperscript{248} McCloud, 3.
\textsuperscript{249} Eisner, *Graphic Storytelling*, 9.
events as told by the author. This definition is important because of the involvement of the reader in the interpretation of the fragments that compose a collective comic. Thierry Groensteen discusses narrative in relation to literature and the advent of cinema, as narrative was once synonymous with literature and oral story traditions, with the advent of film and comics there is now a shift in the understanding of literature.

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250 Eisner, *Graphic Storytelling*, 13, 48. He then suggests that this means we have an innate ability to understanding stories.
251 Groensteen, 8.